

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-4. (canceled)

5. (previously presented) A motor driven machine, comprising:

a switch reluctance motor comprising a casing with an aperture and a stator mounted in the aperture;

a motor spindle extending from the motor; and

a machine spindle formed as a unitary extension in the motor spindle,

the machine spindle being adapted to, in use, be attachable to a work piece, and

the aperture including inwardly extending ribs spaced apart around the aperture and bearing against an outer surface of the stator.

6. (previously presented) The motor driven machine of claim 5, wherein,

the machine is a lathe with a bed,

the machine spindle is a headstock spindle, and

a longitudinal axis of the motor spindle and a longitudinal axis of the headstock spindle lie on substantially the same axis.

7. (new) A motor driven machine, comprising:
a switch reluctance motor comprising a casing, the casing comprising with an aperture and a stator mounted in the aperture, the stator having a smooth and projectionless exterior surface;

a rotor carried by the stator, the rotor having outwardly extending ribs;

a motor spindle carrying the rotor and extending from the motor; and

a machine spindle formed as a unitary extension in the motor spindle,

the machine spindle being adapted to, in use, be attachable to a work piece, and

the aperture including inwardly extending ribs spaced apart around the aperture and bearing against the smooth exterior surface of the stator.

8. (new) A motor driven machine, comprising:
a switch reluctance motor comprising a casing with an interior cylindrical surface having inwardly extending ribs spaced apart around a circumference of the interior cylindrical surface;

a stator mounted against the interior cylindrical surface of the casing, the stator having a smooth and projectionless exterior surface bearing against the inwardly extending ribs of the casing;

a rotor carried by the stator, the rotor having outwardly extending ribs;

a motor spindle carrying the rotor and extending from the motor; and

a machine spindle formed as a unitary extension in the motor spindle,

the machine spindle being adapted to, in use, be attachable to a work piece.

9. (new) The machine of claim 8, wherein the inwardly extending ribs of the casing occupy a minority of the interior cylindrical surface of the casing.

10. (new) The machine of claim 5, wherein the inwardly extending ribs of the casing occupy a minority of the interior cylindrical surface of the casing.